REMARKS

I.   Introduction

Claims 6 – 10 are pending in the above-identified application. In view of the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

II.   Claim Objections

Claim 10 has been objected to as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim. The Examiner once again appears to misunderstand that claim 10 is a product-by-process claim, which is proper. Applicants would like to direct the Examiner to MPEP § 2173.05(f), which recites in pertinent part that a "claim which makes reference to a preceding claim to define a limitation is an acceptable claim construction." The section further provides and example of a proper claim which reads "The product produced by the method of claim 1." Again, Applicants submit that claim 10 is a product claim, not a method claim, and is proper as written.

III.   Claim Rejections Under 35 U.S.C. § 103

Claims 6-10 stands rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Mattsson, in view of Judge et al. Applicants traverse these rejections for at least the following reasons.

Regarding claim 6, the Examiner asserts that Mattsson discloses every claimed feature except for an apparatus for producing refrigeration effect by means of heat exchange between refrigerant and air. The Examiner relies on Judge for the alleged disclosure of a heat exchanger utilizing refrigerant and air, asserting that it would have been obvious to combine Judge and Mattson since a refrigerant/air heat exchanger is a well known type of heat exchanger.

Mattson describes a programming language called Modelica used in simulating heat exchangers. In reference to claim 6, the Examiner appears to equate classifying models, as recited in claim 6, with the BasicLiquid and BasicLiquidLinear classes defined in Mattsson (see. p. 5 of Office Action). Further, the Examiner appears to equate the "categories independent of one another" recited in the claim with the different parameters used in defining BasicLiquid and BasicLiquidLinear. Moreover, the Examiner equates "an abstract class" recited in claim 6 with the BasicLinearLiquid of Mattsson. However, BasicLinearLiquid does not appear to be defined by extracting characteristics common to a plurality of similar parts contained in each category, as is required by the claim language. According to the Examiner's characterization of "categories" as the different parameters defining the classes, the class BasicLinearLiquid does not appear to be defined based on extracting characteristics common to <u>a plurality of similar parts contained in each category (parameter)</u>.

The Examiner has relied on Judge solely for the alleged disclosure of a heat exchanger utilizing refrigerant and air. Judge does not overcome the above described deficiencies of Mattsson. Accordingly, as each and every limitation must be disclosed or suggested by the cited prior art references in order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 (see, M.P.E.P. § 2143.03), and the cited references fail to disclose at least the features described above, it is respectfully submitted that independent claim 6 is patentable over the cited references. Independent claims 7, 9, and 10 include features similar to those described above in reference to claim 6. As such, these claims are also patentable over Mattsson and Judge.

Moreover, with regard to claims 7 – 9, the Examiner has summarily rejected these claims by simply referring to claim 6 and stating that it would have been obvious to incorporate the heat exchanger, tube, fin, and refrigerant classes of Judge with Mattsson because "these are parts of

3

the well known heat exchanger." However, whether these components are known or not is irrelevant as **the combination of Judge and Mattsson does not disclose or suggest the specific configuration described in the claims**. For example, claim 8 includes a feature of "combining a tube class and fin class into the cell class as categories among which models that represent phenomena occurring in the cells are independent of one another." Judge and Mattsson fail to disclose or suggest at least this feature. Thus, if the Examiner wishes to retain the rejection of these claims, Applicants respectfully request that the Examiner make a *prima facie* showing of obviousness, as is required, which clearly explains how the Examiner reads every claimed feature on the cited references.

Claim 8 depends from claim 7. Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Harness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claim 7 is patentable for at least the reasons set forth above, it is respectfully submitted that all dependent claims are also in condition for allowance. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.
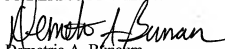
IV. Conclusion

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

4

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Demetria A. Buncum
Registration No. 58,848

**Please recognize our Customer No. 20277
as our correspondence address.**

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 DAB:amz
Facsimile: 202.756.8087
Date: May 5, 2008

5